AMENDED CLAIMS

Claims 1-6 (Cancelled)

7.(New) A bone marrow aspiration trocar for taking liquid bone marrow samples from a bone comprising:

a prehension body including a handle (4), the prehension body having a housing (L) including a bottom support surface,

a bone piercing element shaped as a hollow needle being fixed within the prehension body, the hollow needle having a first portion received within the housing, and having a second portion forming an insertion end (22) projecting forward from the prehension body, the insertion end being configured to pierce a periosteum and an outer part of the bone for reaching bone marrow contained therein, the insertion end (22) having a closed spreading tip and adjacent lateral aspiration holes (21), the first portion formed as a hollow perforating rod (24) which protrudes into the housing (L) of the prehension body (20), and,

an insertable and removable capsule (27) having a vacuum chamber sized for receiving the bone marrow sample and being shaped for receipt in the housing, the capsule engaging the bottom support surface, the capsule having a watertight diaphragm (27a) at a lower end thereof which is pierced by said hollow perforating rod (24), such that vacuum within the vacuum chamber draws the bone marrow sample through the aspiration holes into the vacuum chamber, said capsule forming a pushing surface when disposed in said housing (L) to allow further penetration of the outer part of the bone until withdrawal of the bone marrow sample into the vacuum chamber is initiated.

8.(New) The trocar according to Claim 7 wherein a diameter of said lateral aspiration holes (21) is smaller than an inner diameter of said hollow needle.

9.(New) The trocar according to Claim 7 wherein an axis of each aspiration hole

- (21) forms, with respect to a penetration axis of said hollow needle (23), an angle of at least 90°.
- 10.(New) The trocar according to Claim 7 further comprising a removable cover (26) being disposable within the housing for covering the perforating rod located within the housing during penetration of the periosteum and the outer part of the bone by the insertion end, a pushing surface formed by said cover when disposed in said housing.
- 11. (New) The trocar according to Claim 7 further comprising a plurality of capsules (27) being sequentially receivable within the housing for drawing multiple bone marrow samples.